



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-051-26,474-00-00

Company **Murfin Drilling Company, Inc.**
Well **Kraus-Stecklein Unit No. 1-28**
Field **Leonhardt**
County **Ellis** State **Kansas**

Location

2,475' FNL & 1,500' FWL

Other Services
DIL
MEI/BHCS

Sec: 28

Twp: 14S

Rge: 18W

Elevation

Permanent Datum Ground Level
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 2081
D.F.
G.L. 2076

Date

2/12/2013

Run Number

One

Type Log

CNL / CDL

Depth Driller

3790

Depth Logger

3788

Bottom Logged Interval

3767

Top Logged Interval

2950

Type Fluid In Hole

Chemical

Salinity, PPM CL

12800

Density

9.3

Level

Full

Max. Rec. Temp. F

114

Operating Rig Time

4 Hours

Equipment -- Location

108 Hays

Recorded By

J. Long

Witnessed By

Paul Gunzelman

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

One

12.25

00

217

8.625

23#

00

217

Two

7.875

217

TD

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

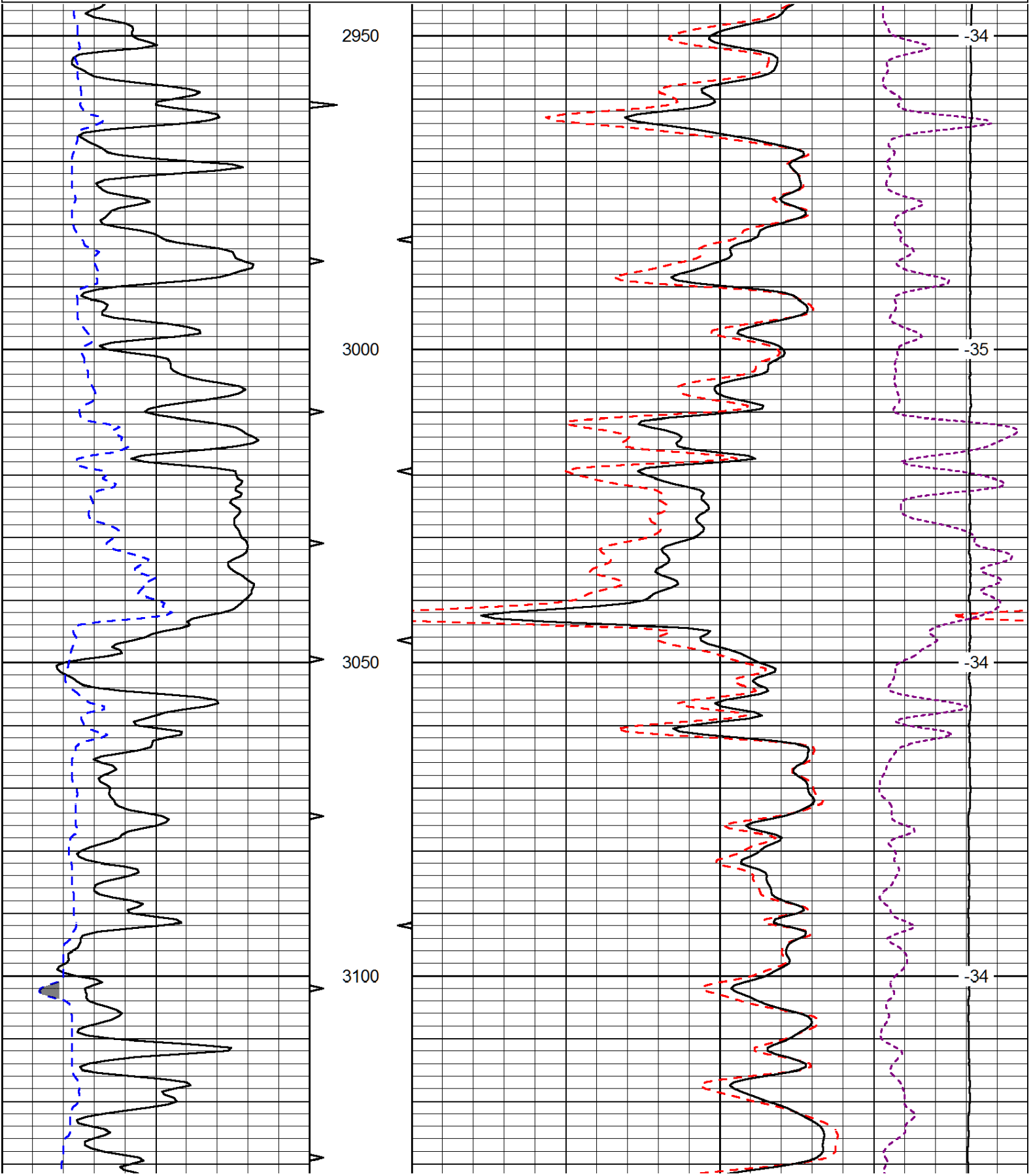
Comments

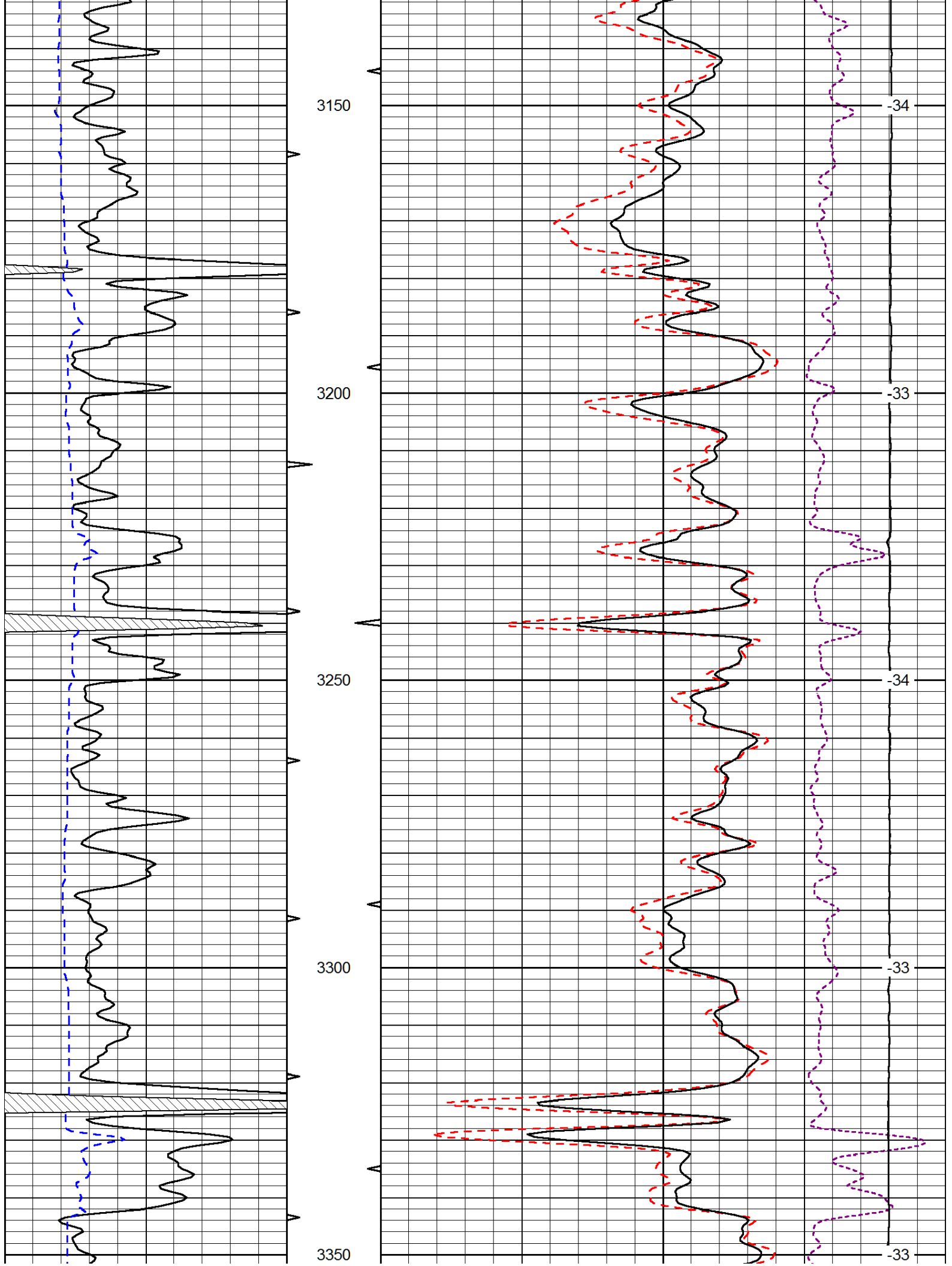
Thank you for using Log-Tech, Inc.
(785) 625-3858

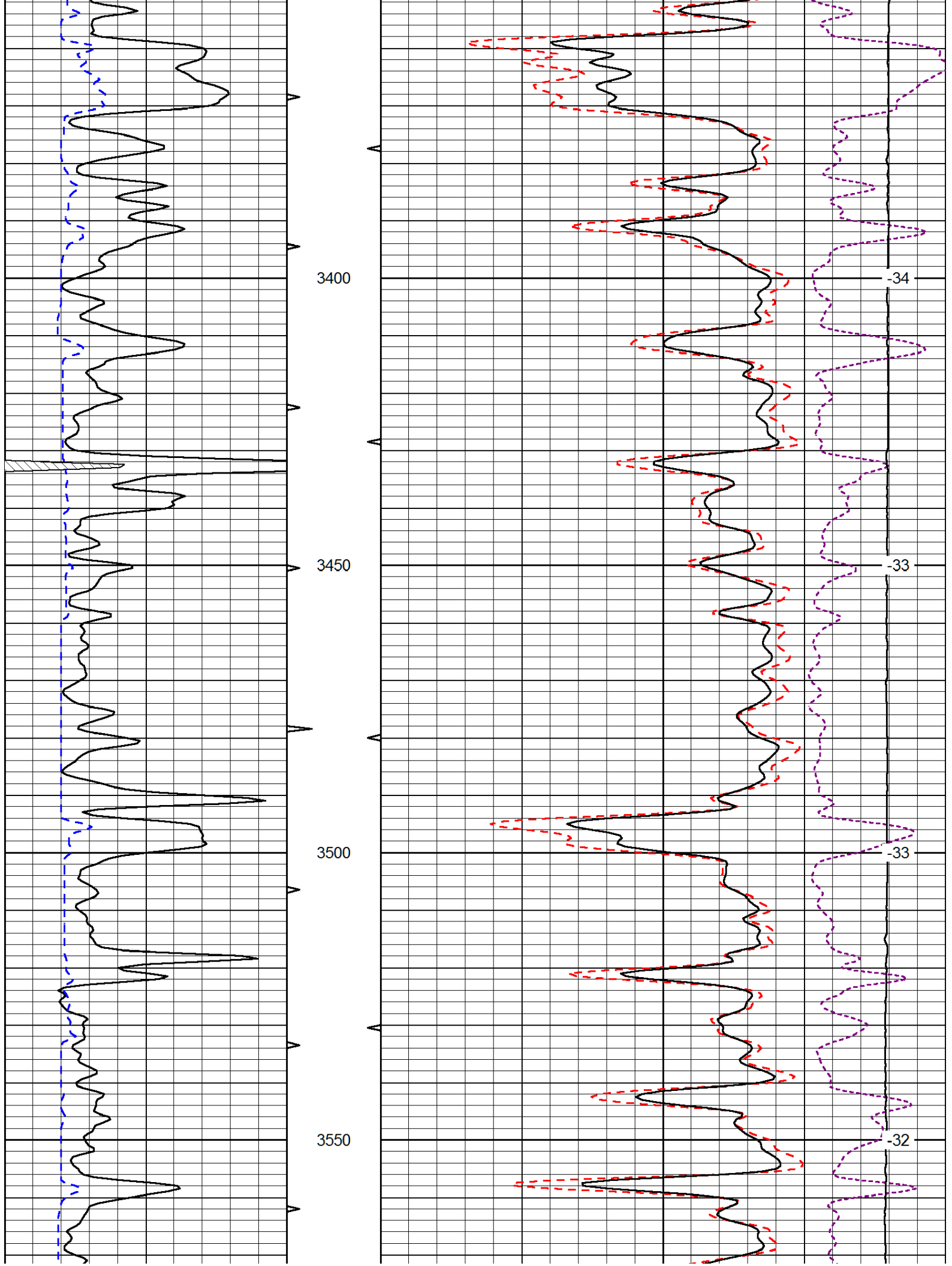
Hays, 3 1/2 South on 240th Avenue, East Into

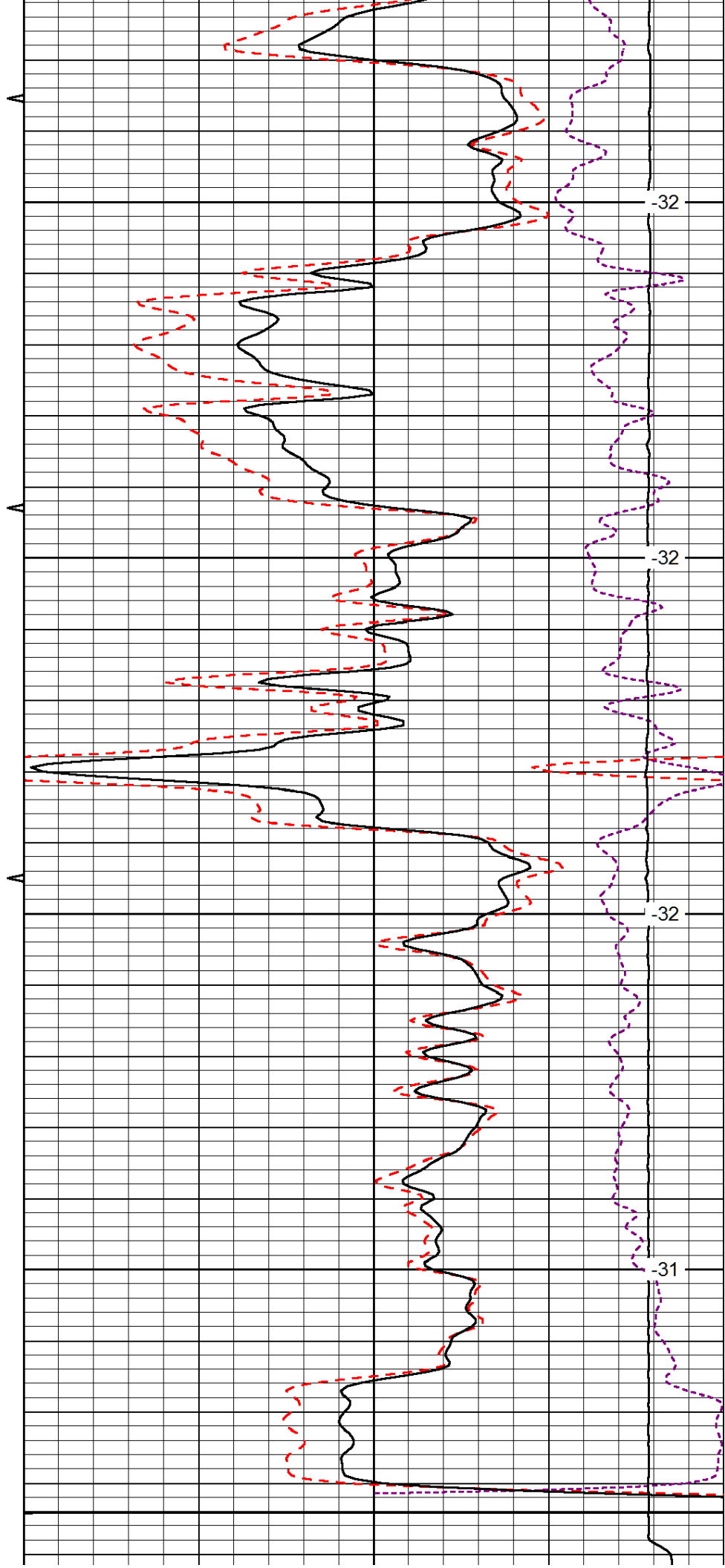
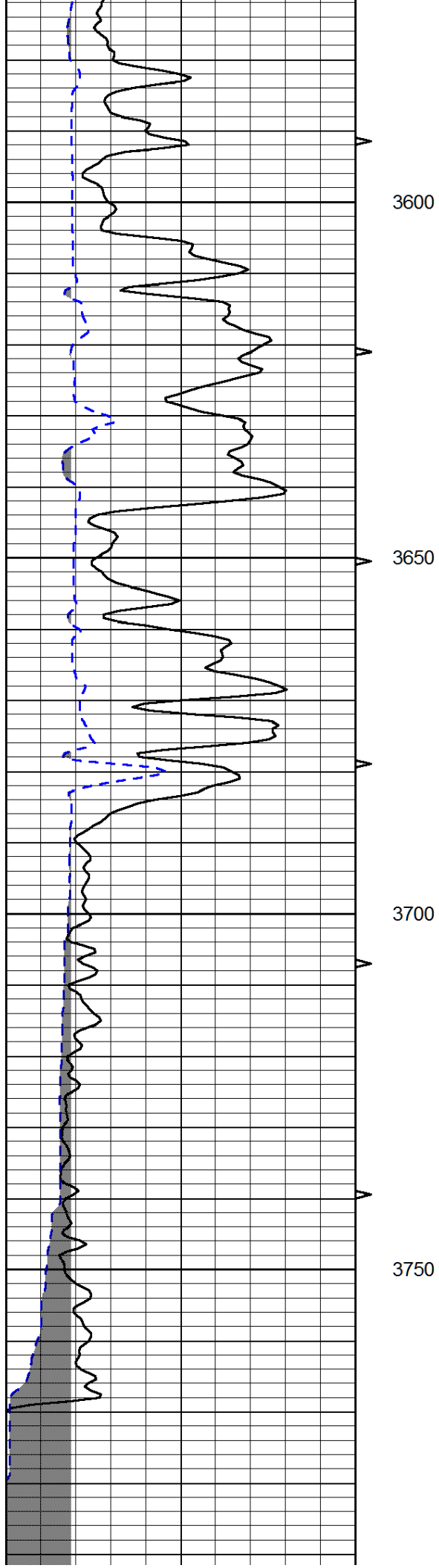
Database File: murfin_kraus-stecklein_1-28hd.db
Dataset Pathname: dil/murfstck
Presentation Format: cdl
Dataset Creation: Tue Feb 12 05:33:24 2013
Charted by: Depth in Feet scaled 1:240

Charted by: Depth in Feet scaled 1:210					
0	Gamma Ray (GAPI)	150	30	Compensated Density (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			15000	Line Tension (lb)	0
			-0.25 Correction (g/cc) 0.25		
			LSPD (ft/min)		





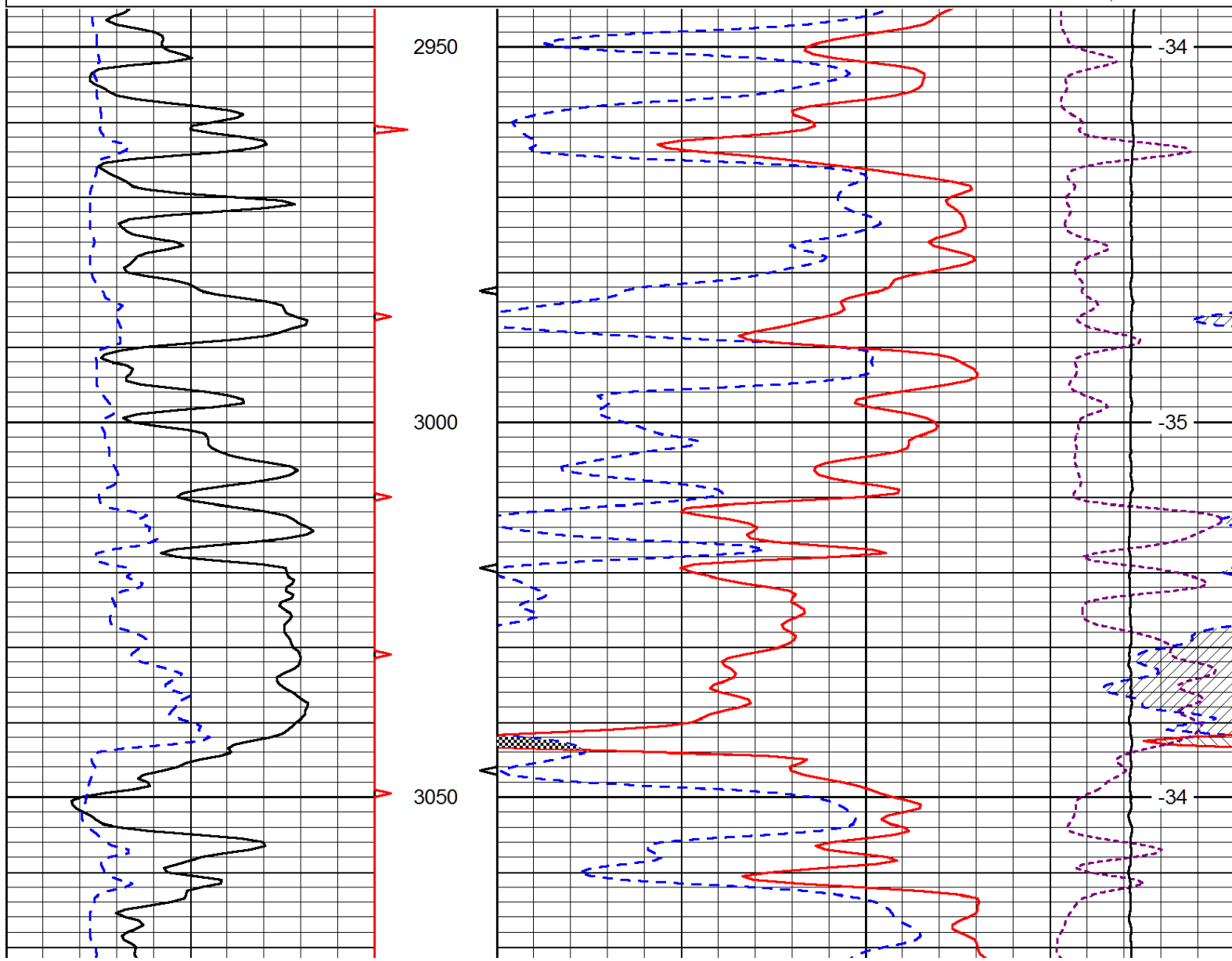


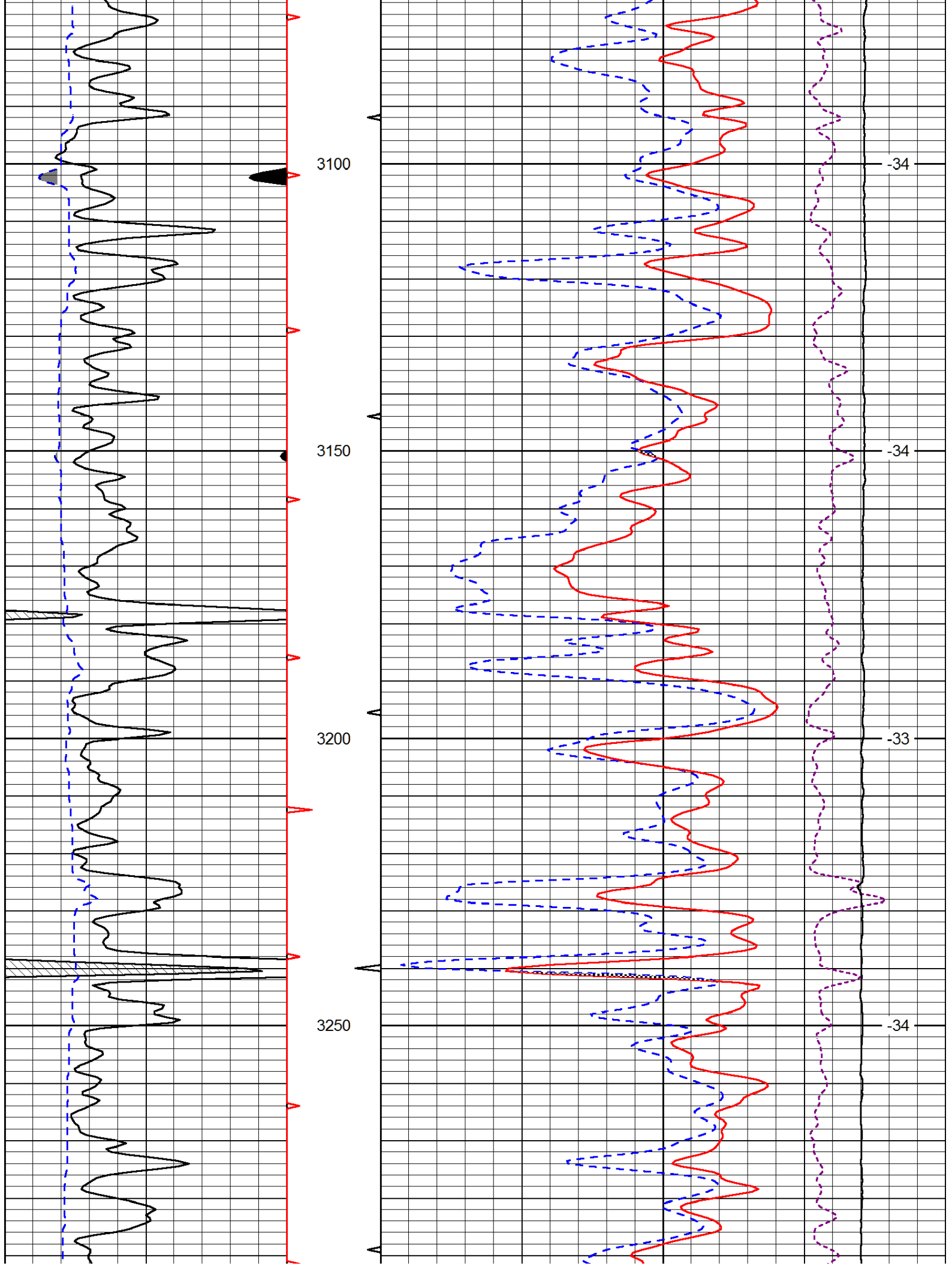


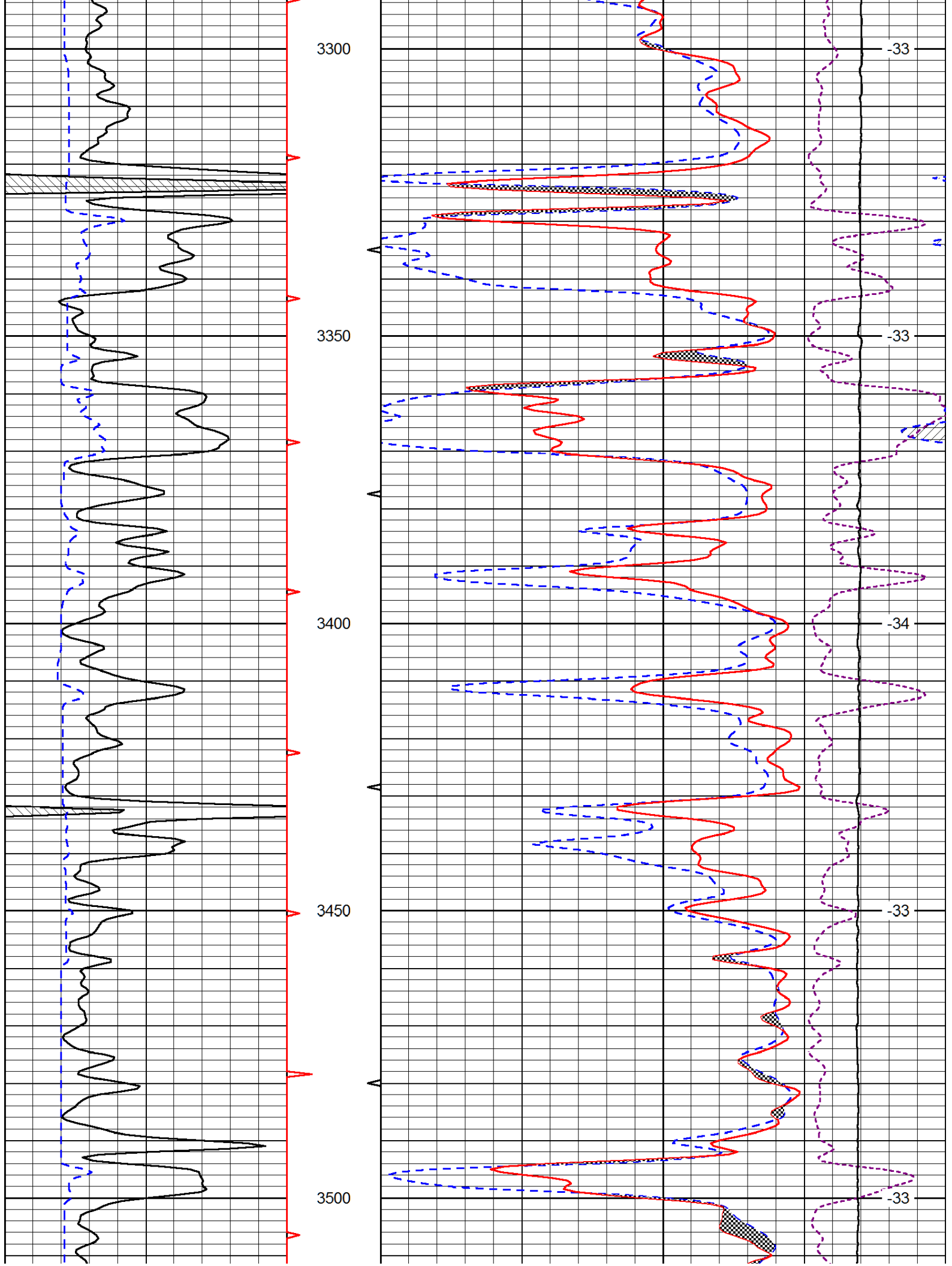
0	Gamma Ray (GAPI)	150	30	Compensated Density (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			15000	Line Tension (lb)	0
			-0.25 Correction (g/cc) 0.25		
			LSPD (ft/min)		

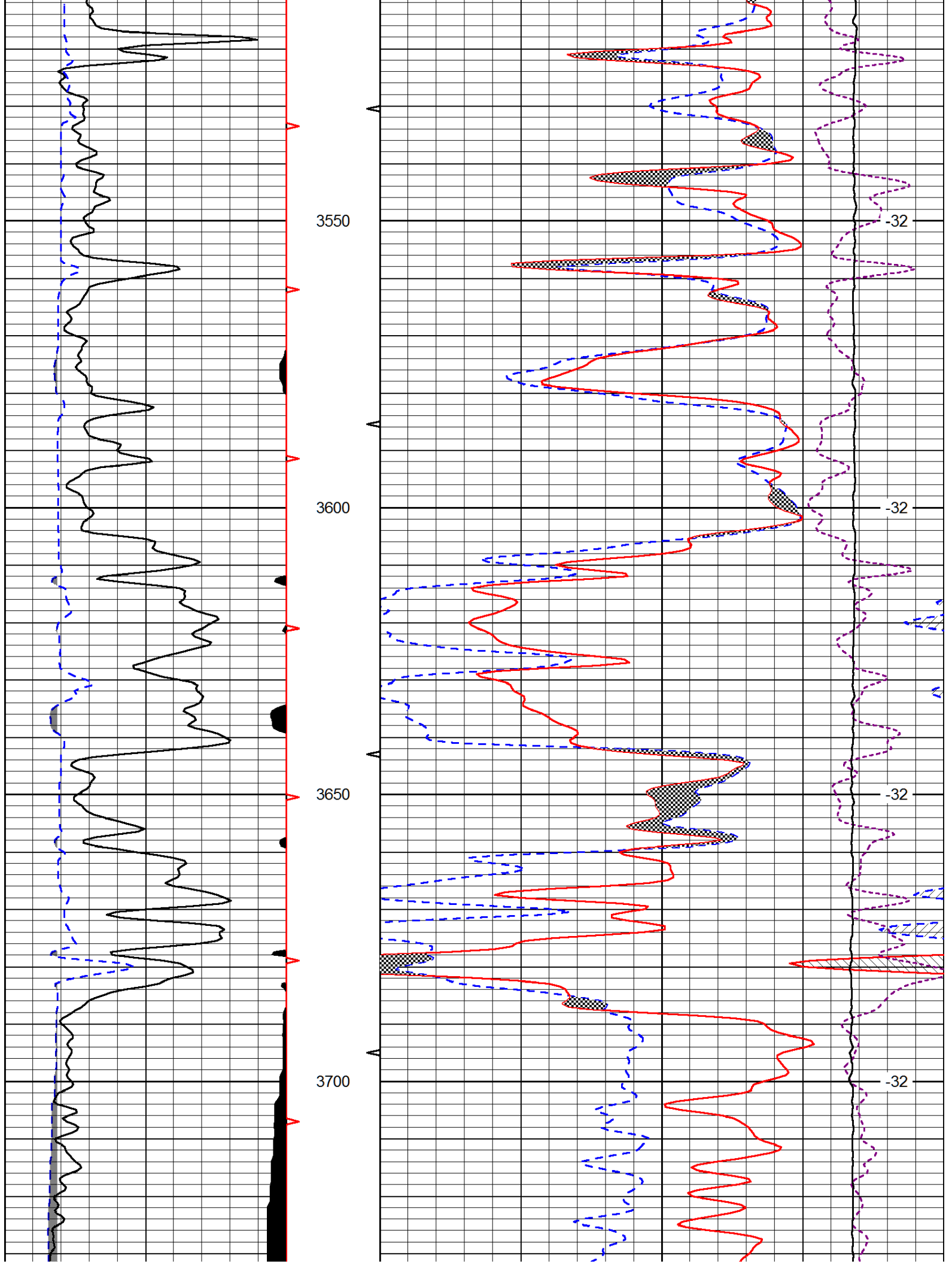
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 Charted by: Depth in Feet scaled 1:240

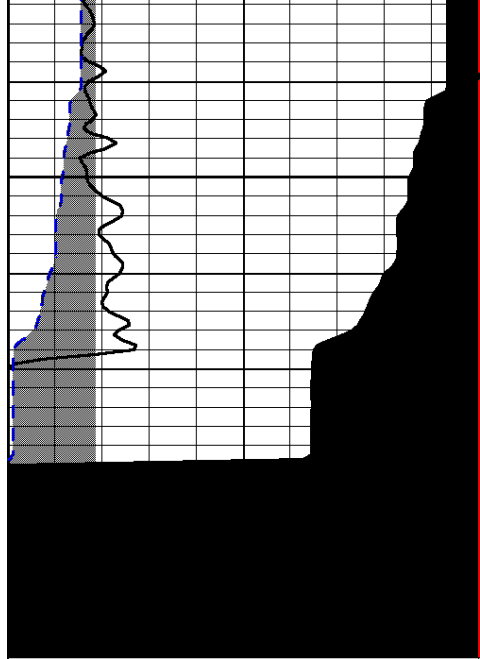
0	Gamma Ray (GAPI)	150	30	CNLS (pu)	-10
6	Caliper (in)	16	30	Compensated Density (2.71 ma) (pu)	-10
			10000	Line Tension (lb)	0
			-0.25 Correction (g/cc) 0.25		
			LSPD (ft/min)		







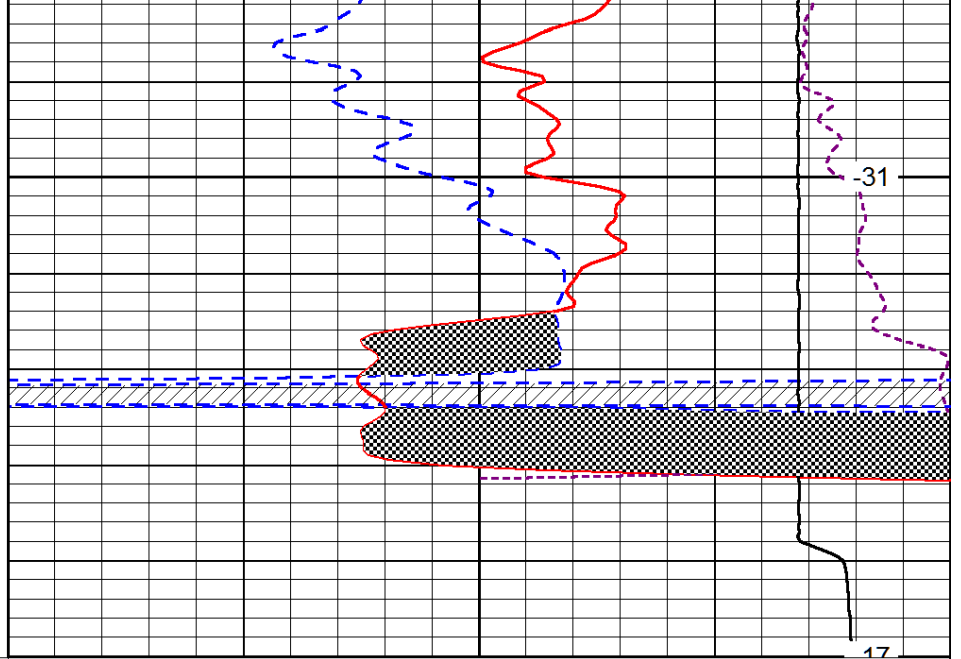




3750

3800

0	Gamma Ray (GAPI)	150
6	Caliper (in)	16



31

17

30	CNLS (pu)	-10
30	Compensated Density (2.71 ma) (pu)	-10
10000	Line Tension (lb)	0

-0.25	Correction (g/cc)	0.25
		LSPD (ft/min)